


## ABSTRACT

This invention is related to a production method of a branched polymer

5        which comprises polymerizing a macromonomer [I],  
      said macromonomer [I] being a vinyl polymer obtainable  
by radical polymerization and terminally having one  
polymerizable carbon-carbon double bond-containing group per  
molecule.

10       Furthermore, by producing the macromonomer by living  
radical polymerization, in particular atom transfer radical  
polymerization, it becomes possible to produce the above  
polymers or gels having well controlled side chain molecular  
weights.